

WHAT IS CLAIMED IS:

1. A computer system comprising:
 - at least one server module;
 - a midplane associated with the server modules, the5 midplane operable to receive the server module and to provide a unique address for each server module based on the location of the server modules on the midplane;
 - at least one address module associated with the server modules, the address module operable to obtain the10 unique address from the midplane for each server module and to calculate a start-up time for each server module based on the unique address for each server module; and
 - at least one power supply associated with the midplane, the power supply operable to sequence power to15 the server modules based on the start-up times for the server modules.

20 2. The system of Claim 1 wherein the server module comprises a blade server.

25 3. The system of Claim 1 wherein the server module comprises a brick server.

25 4. The system of Claim 1 wherein the midplane comprises a circuit board including one or more connectors coupled to the midplane and one or more resistors coupled to the midplane.

5. The system of Claim 4 wherein the connectors are operable to provide an interface between the server modules and the midplane.

5 6. The system of Claim 4 wherein each connector is operable to interface with one server module.

7. The system of Claim 4 wherein the midplane provides a unique address to each server module through 10 resistor strapping the one or more resistors.

8. The system of Claim 1 wherein the midplane is further operable to provide an interface between the server modules and the power supply.

15 9. The system of Claim 1 wherein the power supply is operable to provide power to each server module upon expiration of the start-up time for each server module.

20 10. The system of claim 1 further comprising a management controller associated with the midplane, the management controller operable to provide sequence redundancy by sequencing power to the server modules if the midplane experiences a failure.

25 11. The system of Claim 1 wherein each address module includes a timer, the address module further operable to set the timer with the start-up time and the timer operable to count down from the start-up time.

12. The system of Claim 1 further comprising one or
more switches associated with the server modules and the
address modules, the switches operable to accept a
command from the address modules to switch between an on
5 position and an off position.

13. The system of Claim 12 where at the expiration
of the start-up time the address module switches the
switch to the on position allowing an associated server
10 module to receive power from the power supply.

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14. A method for autonomous power sequencing in a computer system, the method comprising:

receiving one or more server modules;

5 providing a unique address for each server module based on the location of the server modules on a midplane;

obtaining the unique address for each server module from the midplane;

10 calculating a start-up time for each server module based on the unique addresses of the server modules; and automatically sequencing power to the server modules based on the start-up times for the server modules.

15 15. The method of Claim 14 wherein the server module comprises a blade server.

16. The method of Claim 14 wherein the server module comprises a brick server.

20 17. The method of Claim 14 wherein calculating the start-up time comprises:

obtaining a multiplication factor for the server modules; and

25 calculating the start-up time using the multiplication factor.

18. The method of Claim 14 further comprising:
setting a timer with the start-up time;
counting down on the timer until the start-up time
expires; and

5 on the expiration of the start-up time, switching a
switch to an on position that allows the server module to
receive power from a power supply.

19. The method of Claim 14 wherein receiving the
10 server modules comprises inserting the server modules
into at least one connector coupled to the midplane.

20. The method of Claim 14 wherein providing a
unique address for each server module comprises strapping
15 one or more resistors to the midplane whereby each
connector provides a unique address for the server module
associated with the connector.

21. The method of Claim 14 wherein automatically
20 sequencing power to the server modules comprises
providing power to the server modules one server module
at a time.

22. The method of Claim 14 wherein automatically
25 sequencing power to the server modules comprises
providing power to each server module upon the expiration
of the start-up time for each server module.

23. A computer system comprising:
one or more server modules operable to process data;
one or more midplanes associated with the server
modules, the midplanes including a plurality of
5 connectors, each connector operable to interface with one
server module and provide a unique address for each
server module based on which connectors the server
modules interface with;
one or more address modules associated with the
10 server modules, the address modules operable to obtain
the unique address from the connectors for each server
module and to calculate a start-up time for each server
module based on the unique address for each server
module;
15 one or more power supplies associated with the
midplanes, the power supplies operable to provide power
to the server modules in a sequence determined by the
start-up times for the server modules; and
one or more chassis operable to house the server
20 modules, the midplane, and the power supply.

24. The system of 23 further comprising one or more
management controllers associated with the midplanes, the
management controllers operable to provide sequence
25 redundancy when one or more of the midplanes experiences
a failure.

25. The system of Claim 23 further comprising one
or more cabinets housing one or more of the chassis.